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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,856	03/19/2001	William Ziegler	18133-058	9209

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EXAMINER

HYEON, HAE M

ART UNIT PAPER NUMBER

2839

DATE MAILED: 04/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,856

Applicant(s)

ZIEGLER ET AL.

Examiner

Hae Moon Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed. Drawings contain hand written letters.

Specification

2. The disclosure is objected to because of the following informalities: On page 1, lines 18 and 19, the full terminology for the abbreviations "UL" and "VDE" are required. Appropriate correction is required.
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Also, the abbreviation "UPS" requires full terminology.

Claim Objections - 37 CFR § 1.75(d)

4. The following is a quotation of an appropriate paragraph of 37 CFR 1.75:

(d) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a)).
5. Claims 1-16 are objected under 37 C.F.R. 1.75(d) because the present specification does not clearly state the specific type of devices that functions as the energy storage device.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-6, 9-11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Lin (5,389,462).

The admitted prior art discloses the uninterruptible power supplies 10 comprising an input 24 to receive AC power from an AC power source, an output 26 to provide AC power, an inverter 20 to receive DC power and to provide AC power, an energy storage device 18 electrically coupled to the inverter 20, and a transfer switch 14 to select one of the AC power source and the energy storage device 18 as an output power source for the uninterruptible power supplies 10. However, the admitted prior art does not disclose a first connector coupled to the inverter 20 being mated with a second connector coupled to the energy storage device 18 through a plurality of lead wires and the energy storage device 18 including a cap covering a plurality of terminals of the energy storage device 18 and the lead wires.

Lin discloses storage battery comprising a plurality of terminals 19, a plurality of lead wires 15, a connector 17 and a cap 13. Each lead wire 15 has a first end connected to one of the terminals 19 and a second end connected to the connector 17. The connector 17 of Lin does not require a use of a tool for mating. Lin teaches that the cap 13 is a protective cover that covers the terminals 19 and the lead wires 15. Regarding the cap providing impact protection, any cap provides certain amount of impact protection.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the battery taught by the admitted prior art such that it would have a cap as taught by Lin to protect terminals and lead wires of the battery.

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8. Claims 2, 3, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and Lin as applied to claims 1, 4-6, 9-11, 13, and 14 above, and further in view of Radliff et al (5,606,150).

The admitted prior art does not disclose the energy storage device cap with strain relief for the lead wires. While Lin shows the lead wires 15 being weaved on the battery, Lin does not state his/her battery has strain relief for the lead wires 15. Also, the cap 13 of Lin is a flat plate without any post to provide strain relief for the lead wires 15.

Radliff discloses an enclosure 10 comprising a cover 12 having a plurality of projections 60 for weaving cables 202, 204 on the cover 12. Radliff states in column 3, lines 1-3 states that the enclosure has enhanced strain relief benefits.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to the cover taught by Lin such that it would have a plurality of projections for weaving cables to enhance strain relief on the cables.

9. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and Lin as applied to claims 1, 4-6, 9-11, 13, and 14 above, and further in view of Lund et al (5,908,714).

While both the admitted prior art and Lin do not disclose an insulating tube formed around the plurality of lead wires, Lund shows in Figure 2 a plurality of lead wires 22 are passed through a tube. Figure 2 of Lund clearly shows lead wires are passed through a tube.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the battery taught by the admitted prior art or by Lin such that it would have a tube formed around a plurality of lead wires of the battery as taught by Lund to organize and to protect the plurality of lead wires.

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10. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and Lin as applied to claims 1, 4-6, 9-11, 13, and 14 above, and further in view of Peterson (6,303,248 B1).

While both the admitted prior art and Lin do not disclose the use of a shrink wrap material to attach the cap to the energy storage device. Peterson, on the other hand, discloses a battery pack having battery holders 22, 23, end caps 40, 42 and a shrink wrap 124. The shrink wrap 124 attaches the end caps 40, 42 to the battery holders 22, 23 tightly.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the shrink wrap taught by Peterson in the energy storage device of Lin to tightly attach the cap to the energy storage device.

Double Patenting

11. Applicant is advised that should claim 1 be found allowable, claim 9 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 3,456,181 by Godshalk, US Patent No. 5,246,793 by Scott, US Patent No. 6,010,804 by Barksdale, and US Patent No. 6,120,934 by Linning, Jr. et al. discloses a battery

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with a cap. US Patent No. 5,978,236 by Faberman et al. discloses an uninterruptible power supply. US Patent No. 6,193,543 B1 by Howard et al. disclose an adjustable strain relief retainer for electrical cords. US Patent No. 4,386,818 by Millhimes et al., US Patent No. 5,984,718 by James, and US Patent No. 6,343,949 B1 by Floyd disclose a jumper cable having a mating connector assembly, which does not require the use of tools.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae Moon Hyeon whose telephone number is 703-308-4802. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

hnh *hnh*
April 20, 2002


BRIAN SIRCUS
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TECHNOLOGY CENTER 2800